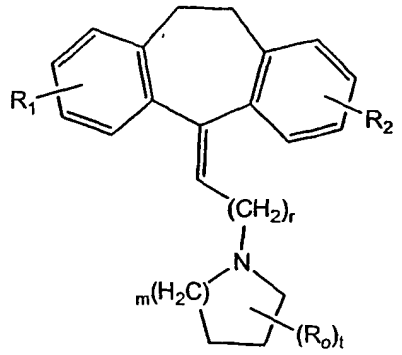
CLAIMS

What is claimed is:

1. A method of treating a subject for a sleep disorder, comprising administering to a subject in need of treatment for a sleeping disorder an effective amount of a compound represented by structural formula **II**;



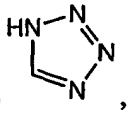
II

wherein

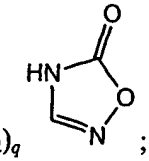
R^1 and R^2 independently are -H, halogen, hydroxy, -CN, $-NO_2$, C_{1-6}-alkyl, halogenated C_{1-6}-alkyl, C_{1-6}-alkoxy, halogenated C_{1-6}-alkoxy, $-NR^{21}R^{22}$, $-(SO_2)NR^{21}R^{22}$, $-NR^{21}(SO_2)NR^{22}$, $-(CO)NR^{21}R^{22}$, $-NR^{21}(CO)R^{22}$, $-(CO)R^{22}$, or $-(CO_2)R^{22}$,

R^{21} and R^{22} independently are -H or C_{1-6}-alkyl;

R_o is C_{1-6}-alkyl, halogenated C_{1-6}-alkyl, C_{1-6}-alkoxy, halogenated C_{1-6}-alkoxy, phenyl, phenyl substituted with halogen, hydroxy, nitro or cyano, $-(CH_2)_qCOR^p$, $-(CH_2)_qCONHSO_2Aryl$, $-(CH_2)_qCONHSO_2Heteroaryl$, $-(CH_2)_qCONHS(O)_2$-Alkyl, $-(CH_2)_qOH$ $-(CH_2)_qSO_2R^p$, $-(CH_2)_qS(O)_2NHCO$-alkyl, $-(CH_2)_qS(O)_2NHCO$-aryl, $-(CH_2)_qS(O)NHCO$-alkyl, $-(CH_2)_qS(O)NHCO$-aryl, $-(CH_2)_qP(O)(OH)_2$, $-(CH_2)_q$ P(O)OH,



, or



;

wherein q is 0, 1 or 2;

R^p is H, OH or C_{1-8} alkyl,

r is 1, 2, 3 or 4;

m is 1 or 2, and

t is 1, 2, or 3; or a pharmaceutically acceptable salt, solvate, or hydrate thereof.

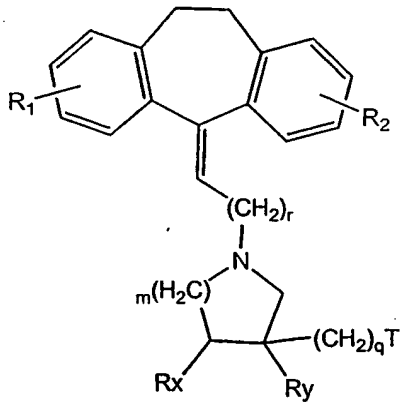
2. The method of Claim 1 wherein the subject is a human.

3. The method of Claim 1, wherein the subject is treated for a circadian rhythm adjustment disorder.

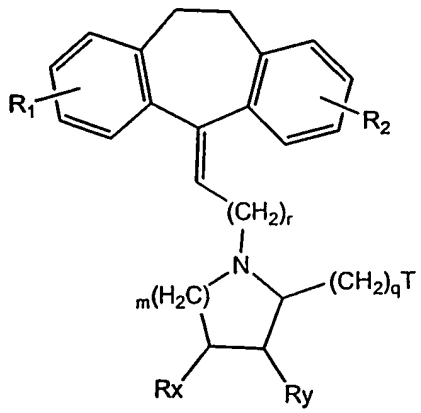
4. The method of Claim 1, wherein the subject is treated for a sleep disorder selected from sleep apnea, somnambulism, night terrors, restless leg syndrome, sleep onset insomnia, and sleep maintenance insomnia.

5. The method of Claim 4 wherein the subject is treated for sleep onset insomnia or sleep maintenance insomnia.

6. A method of treating a subject for a sleep disorder, comprising administering to a subject in need of treatment for a sleeping disorder an effective amount of a compound represented by structural formula **IIIa** or **IIIb**:



IIIa



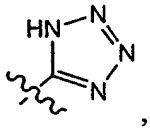
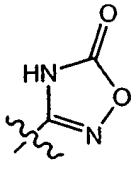
IIIb

wherein

R^1 and R^2 independently are -H, halogen, hydroxy, -CN, $-NO_2$, C_{1-6}-alkyl, halogenated C_{1-6}-alkyl, C_{1-6}-alkoxy, halogenated C_{1-6}-alkoxy, $-NR^{21}R^{22}$, $-(SO_2)NR^{21}R^{22}$, $-NR^{21}(SO_2)NR^{22}$,

$-(CO)NR^{21}R^{22}$, $-NR^{21}(CO)R^{22}$, $-(CO)R^{22}$, or $-(CO_2)R^{22}$, and R^{21} and R^{22} independently are -H or C_{1-6}-alkyl;

R_x and R_y are, independently, hydrogen, C_{1-6}-alkyl, halogenated C_{1-6}-alkyl, C_{1-6}-alkoxy, halogenated C_{1-6}-alkoxy, or, taken together, R_x and R_y form a bond;

T is COOH, $COOR^a$, $CONHSO_2Aryl$, $CONHSO_2Heteroaryl$, $CONHS(O)_2Alkyl$, SO_3H, $S(O)_2NHCOAlkyl$, $S(O)_2NHCOAryl$, S(O)NHCOAlkyl, (O)NHCO-Aryl, $P(O)(OH)_2$,  , or  ;

R^a is C_1-C_6 alkyl;

q is 0, 1 or 2;

r is 1, 2, 3 or 4; and

m is 1 or 2; or a pharmaceutically acceptable salt, solvate, or hydrate thereof.

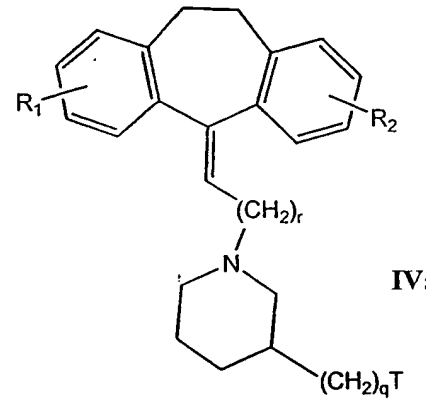
7. The method of Claim 6 wherein the subject is a human.

8. The method of Claim 6, wherein the subject is treated for a circadian rhythm adjustment disorder.

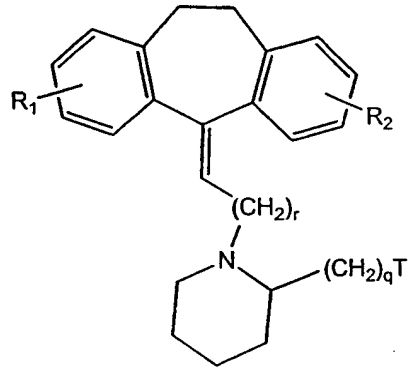
9. The method of Claim 6, wherein the subject is treated for a sleep disorder selected from sleep apnea, somnambulism, night terrors, restless leg syndrome, sleep onset insomnia, and sleep maintenance insomnia.

10. The method of Claim 9 wherein the subject is treated for sleep onset insomnia or sleep maintenance insomnia.

11. A method of treating a subject for a sleep disorder, comprising administering to a subject in need of treatment for a sleeping disorder an effective amount of a compound represented by structural formula **IVa** or **IVb**:



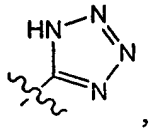
IVa

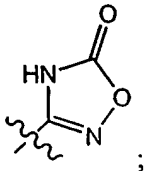


IVb

wherein

R^1 and R^2 independently are -H, halogen, hydroxy, -CN, $-NO_2$, C_{1-6}-alkyl, halogenated C_{1-6}-alkyl, C_{1-6}-alkoxy, halogenated C_{1-6}-alkoxy, $-NR^{21}R^{22}$, $-(SO_2)NR^{21}R^{22}$, $-NR^{21}(SO_2)NR^{22}$, $-(CO)NR^{21}R^{22}$, $-NR^{21}(CO)R^{22}$, $-(CO)R^{22}$, or $-(CO_2)R^{22}$, and R^{21} and R^{22} independently are -H or C_{1-6}-alkyl;

T is COOH, $COOR^a$, $CONHSO_2Aryl$, $CONHSO_2Heteroaryl$, $CONHS(O)_2Alkyl$, SO_3H, $S(O)_2NHCOAlkyl$, $S(O)_2NHCOAryl$, S(O)NHCOAlkyl, S(O)NHCO-Aryl, $P(O)(OH)_2$, 

, or 

;

R^a is C_1-C_6 alkyl;

q is 0, 1 or 2; and

r is 1, 2, 3 or 4; or a pharmaceutically acceptable salt, solvate, or hydrate thereof.

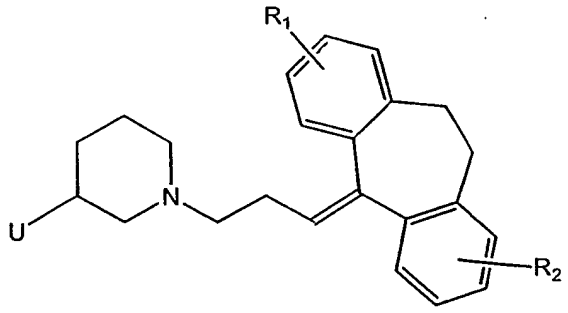
12. The method of Claim 11 wherein the subject is a human.

13. The method of Claim 11, wherein the subject is treated for a circadian rhythm adjustment disorder.

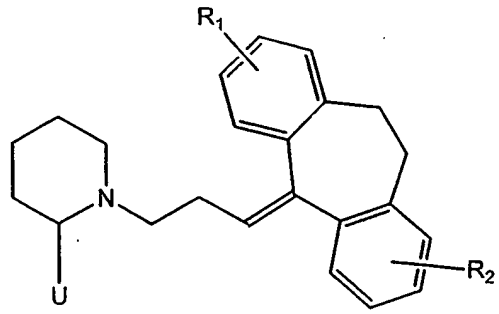
14. The method of Claim11, wherein the subject is treated for a sleep disorder selected from sleep apnea, somnambulism, night terrors, restless leg syndrome, sleep onset insomnia, and sleep maintenance insomnia.

15. The method of Claim 14 wherein the subject is treated for sleep onset insomnia or sleep maintenance insomnia.

16. A method of treating a subject for a sleep disorder, comprising administering to a subject in need of treatment for a sleeping disorder an effective amount of a compound represented by structural formula **Va** or **Vb**:



Va,

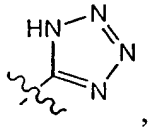
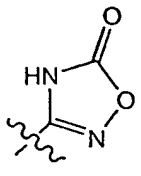


Vb

wherein

R^1 and R^2 independently are -H, halogen, hydroxy, -CN, $-NO_2$, o C_{1-6}-alkyl, halogenated C_{1-6}-alkyl, C_{1-6}-alkoxy, halogenated C_{1-6}-alkoxy, $-NR^{21}R^{22}$, $-(SO_2)NR^{21}R^{22}$, $-NR^{21}(SO_2)NR^{22}$, $-(CO)NR^{21}R^{22}$, $-NR^{21}(CO)R^{22}$, $-(CO)R^{22}$, or $-(CO_2)R^{22}$, R^{21} and R^{22} independently are -H or C_{1-6}-alkyl;

R^a is C_1-C_6 alkyl; and

U is COOH, $COOR^a$, $CONHSO_2Aryl$,  , or  ;

or a pharmaceutically acceptable salt, solvate, or hydrate thereof.

17. The method of Claim 16 wherein the subject is a human.

18. The method of Claim 16, wherein the subject is treated for a circadian rhythm adjustment disorder.

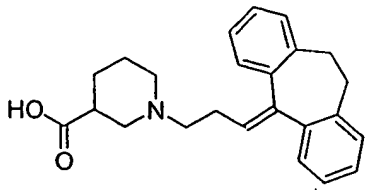
19. The method of Claim16, wherein the subject is treated for a sleep disorder selected from sleep apnea, somnambulism, night terrors, restless leg syndrome, sleep onset insomnia, and sleep maintenance insomnia.

20. The method of Claim 19 wherein the subject is treated for sleep onset insomnia or sleep maintenance insomnia.

21. The method of Claim 1, 6, 11, or 16 wherein R^1 and R^2 independently are -H, halogen, hydroxy, C_{1-6}-alkyl or C_{1-6}-alkoxy.

22. The method of Claim 1, 6, 11, or 16, wherein R^1 and R^2 independently are –H or halogen.

23. A method of treating a subject for insomnia, comprising administering to a subject in need of treatment for insomnia an effective amount of a compound **1**:



1

or a pharmaceutically acceptable salt, solvate, or hydrate thereof.

24. The method of Claim 23, wherein the compound is the *R* isomer of compound **1**.

25. The method of Claim 23, wherein the compound is the *S* isomer of compound **1**.